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EXAMINER
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2665	19

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/457,889	CARONNI ET AL.	
	Examiner	Art Unit	
	Michael J Molinari	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 April 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The Examiner requests that Applicant provide the serial numbers of the copending applications listed on pages 2 and 3 of the specification as well as an update of the status of said copending applications.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 4, 7-9, 11, 14-15, 17-18, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teraoka et al. ("A Network Architecture Providing Host Migration Transparency") in view of Short et al. (U.S. Patent No. 6,130,892).

3. Referring to claim 1, Teraoka et al. disclose a method in a distributed system for communicating in a network with a source node and a destination node, the method comprising the steps of: accessing an address of the destination node by the source node (see page 213, lines 19-20); sending a first packet by the source node to the destination node by using the accessed address (see page 213, lines 20-22); receiving the first packet by the destination node at the accessed address of the destination node (see Section 4.2 on pages 213 and 214. Note that Host-X originally receives packets at its original location in Net-A where its PN-address equals its VN-address); updating the accessed address to reflect a new address of the destination node

responsive to a change in the address of the destination node to the new address (see page 213, lines 33-35); sending a second packet by the source node to the destination node by using the new address (see page 213, lines 35-36); and receiving the second packet by the destination node at the new address of the destination node (see page 213, lines 35-36). Teraoka et al. differ from claim 1 in that they fail to disclose that the routers can be implemented as software. However, implementing routers as software is well known in the art. For example, Short et al. teach that routers can be implemented as software and/or hardware (see column 2, lines 29-30), which has the advantage of adding flexibility to the network design. One skilled in the art would have recognized the advantage of being able to implement routers using software and/or hardware as taught by Short et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of software and/or hardware for routers as taught by Short et al. into the invention of Teraoka et al. to achieve the advantage of adding flexibility to the network design.

4. Referring to claim 2, Teraoka et al. disclose that the source node and the destination node have a local address cache, and wherein the receiving the first packet step includes the steps of: storing, in the local cache of the destination node, an address of the sending node (see page 213, lines 24-25, note that in receiving the query and then using the address received to respond, the receiving node would either already have the sending node's address in its address table or would add the address in the received packet to its address table); and wherein the updating step further includes the steps of: retrieving from the local cache of the destination node the address of the sending node (see page 213, lines 33-35, noting that outgoing packets are addressed based on what is stored in the routing table of the router); sending a third packet containing the new

address of the destination node to the source node by the destination node using the address of the source node (see page 213, lines 33-35); receiving the third packet by the source node (see page 213, lines 33-35); and storing, in the local cache of the source node, the new address of the destination node (see page 213, lines 33-35).

5. Referring to claim 4, Teraoka et al. disclose that the source node and the destination node communicate with other nodes by using a multicast address (in IP networks all subnets have a multicast address. In the event that two hosts start out on the same subnet, they would be able to communicate with each other by using a mutlicast address) such that a communication sent to the multicast address is sent to the source node, the destination node, and the other nodes, the source node and the other nodes having a local cache, wherein the updating step further includes the steps of: sending a third packet containing the new address of the destination node to the source node by the destination node using the multicast address; receiving the third packet by the source node and the other nodes; and storing in the local cache of the source node and the other nodes the new address of the destination node (see page 214, lines 2-10).

6. Referring to claim 7, Teraoka et al. disclose that the change in the address of the destination node to the new address is caused by a device on which the destination node runs physically changing locations (see page 213, lines 19-20 and lines 24-25).

7. Referring to claim 8, Teraoka et al. disclose a method in a distributed system for communicating in a network with a source node and a destination node, wherein the source node and the destination node have an address, the method comprising the steps of: receiving the first packet by the destination node, at an address of the destination node, from the source node, the packet being addressed to the address of the destination node (see Section 4.2 on pages 213 and

214. Note that Host-X originally receives packets at its original location in Net-A where its PN-address equals its VN-address); updating the address of the destination node to a new address responsive to a change in the address of the destination node to the new address (see page 213, lines 35-36); and receiving a second packet by the destination node at the new address (see page 213, lines 33-35). Teraoka et al. differ from claim 8 in that they fail to disclose that the routers can be implemented as software. However, implementing routers as software is well known in the art. For example, Short et al. teach that routers can be implemented as software and/or hardware (see column 2, lines 29-30), which has the advantage of adding flexibility to the network design. One skilled in the art would have recognized the advantage of being able to implement routers using software and/or hardware as taught by Short et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of software routers as taught by Short et al. into the invention of Teraoka et al. to achieve the advantage of adding flexibility to the network design.

8. Referring to claim 9, Teraoka et al. disclose that the destination node has a local address cache, and wherein the receiving first packet step includes the steps of: storing, in the local cache of the destination node, an address of the sending node (see page 213, lines 24-25, note that in receiving the query and then using the address received to respond, the receiving node would either already have the sending node's address in its address table or would add the address in the received packet to its address table); and wherein the updating step further includes the steps of: retrieving from the local cache of the destination node the address of the sending node (see page 213, lines 33-35, noting that outgoing packets are addressed based on what is stored in the routing table of the router); and sending a third packet containing the new address of the

destination node by the destination node to the source node, using the address of the source node (see page 213, lines 33-35).

9. Referring to claim 11, Teraoka et al. disclose that the source node and the destination node communicate with other nodes by using a multicast address (in IP networks all subnets have a multicast address. In the event that two hosts start out on the same subnet, they would be able to communicate with each other by using a multicast address) such that a communication sent to the multicast address is sent to the source node, the destination node, and the other nodes, the source node and the other nodes having a local cache, and wherein the updating step further includes the step of: sending a third packet containing the new address of the destination node to the source node by the destination node using the multicast address (see page 214, lines 2-10).

10. Referring to claim 14, Teraoka et al. disclose that the change in the address of the destination node to the new address is caused by a device on which the destination node runs physically changing locations (see page 213, lines 19-20 and lines 24-25).

11. Referring to claim 15, Teraoka et al. disclose a method in a data processing system for communicating in a network with a source node and a destination node, wherein each node has an address, the method comprising the steps of: sending a first packet from the source node to the destination node by using the address of the destination node (see page 213, lines 19-20); receiving a new address by the source node to supersede the address of the destination node responsive to a change in the address of the destination node to the new address (see page 213, lines 33-35); and sending a second packet from the source node to the destination node by using the new address (see page 213, lines 35-36). Teraoka et al. differ from claim 1 in that they fail to disclose that the routers can be implemented as software. However, implementing routers as

software is well known in the art. For example, Short et al. teach that routers can be implemented as software and/or hardware (see column 2, lines 29-30), which has the advantage of adding flexibility to the network design. One skilled in the art would have recognized the advantage of being able to implement routers using software and/or hardware as taught by Short et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of software and/or hardware for routers as taught by Short et al. into the invention of Teraoka et al. to achieve the advantage of adding flexibility to the network design.

12. Referring to claim 17, Teraoka et al. disclose that the change in the address of the destination node to the new address is caused by a device on which the destination node runs physically changing locations (see page 213, lines 19-20 and lines 24-25).

13. Referring to claim 18, Teraoka et al. disclose a distributed system with a plurality of devices, comprising: a first of the devices comprising: a source node that sends a first packet to a destination node using an address of the destination node (see page 213, lines 19-20), that receives a new address to supersede the address of the destination node responsive to a change in the address of the destination node to the new address (see page 213, lines 33-35), and that sends a second packet to the destination node using the new address (see page 213, lines 35-36); and a second device comprising: a destination node that receives the first packet at the address and that sends the new address to the source node in response to the change in the address of the destination node to the new address (see page 213, lines 33-35), and that receives the second packet (see page 213, lines 35-36). Teraoka et al. differ from claim 1 in that they fail to disclose that the routers can be implemented as software. However, implementing routers as software is

well known in the art. For example, Short et al. teach that routers can be implemented as software and/or hardware (see column 2, lines 29-30), which has the advantage of adding flexibility to the network design. One skilled in the art would have recognized the advantage of being able to implement routers using software and/or hardware as taught by Short et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of software and/or hardware for routers as taught by Short et al. into the invention of Teraoka et al. to achieve the advantage of adding flexibility to the network design.

14. Referring to claim 20, Teraoka et al. disclose that the change in the address of the destination node to the new address is caused by a device on which the destination node runs physically changing locations (see page 213, lines 19-20 and lines 24-25).

15. Referring to claim 22, Teraoka et al. disclose a computer-readable medium containing instructions for controlling a data processing system to perform a method, the method for communicating in a network with a source node and a destination node, wherein each node has an address, the method comprising the steps of: sending a first packet from the source node to the destination node by using the address of the destination node (see page 213, lines 20-22); receiving a new address by the source node to supersede the address of the destination node responsive to a change in the address of the destination node to the new address (see page 213, lines 33-35); and sending a second packet by the source node to the destination node by using the new address (see page 213, lines 35-36). Teraoka et al. differ from claim 22 in that they fail to disclose that the routers can be implemented as software. However, implementing routers as software is well known in the art. For example, Short et al. teach that routers can be

implemented as software and/or hardware (see column 2, lines 29-30), which has the advantage of adding flexibility to the network design. One skilled in the art would have recognized the advantage of being able to implement routers using software and/or hardware as taught by Short et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of software and/or hardware for routers as taught by Short et al. into the invention of Teraoka et al. to achieve the advantage of adding flexibility to the network design.

16. Referring to claim 24, Teraoka et al. disclose that the change in the address of the destination node to the new address is caused by a device on which the destination node runs physically changing locations (see page 213, lines 19-20 and lines 24-25).

17. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teraoka et al. in view of Short et al. as applied to claim 1 above, and further in view of Forman et al. ("The Challenges of Mobile Computing").

18. Referring to claim 3, Teraoka et al. in view of Short et al. disclose the method of claim 1 and teach the use of central address store to manage the addresses of mobile hosts (name server, see page 210, line 35), but differ from claim 3 in that they fail to disclose a method of updating such a central address store. However, the use of central address stores for maintaining location information about mobile hosts and a method of updating them is well known in the art. For example, Forman et al. disclose the use of a central address store, the method further comprising the steps of: storing the address of the source node and the destination node in the central address store; and wherein the sending a first packet step further includes the step of: accessing the address of the destination node from the central address store; and wherein the updating step

further includes the steps of: sending a third packet containing the new address of the destination node to the central address store by the destination node; and storing the new address of the destination node in the central address store; and accessing the new address by the source node (see pages 8-9, "Central Services"), which has the advantage of making it easier to keep track of mobile hosts. One skilled in the art would have recognized the advantage of using a central address store as taught by Forman et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of a central address store into the invention of Teraoka et al. in view of Short et al. to achieve the advantage of making it easier to keep track of mobile hosts.

19. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Francis et al. (U.S. Patent No. 5,331,637) in view of Teraoka et al. ("A Network Architecture Providing Host Migration Transparency"), further in view of Short et al.

20. Referring to claim 5, Francis et al. teach a method for routing multicast packets in a network in which the nodes communicate by using a multicast address such that a communication sent to the multicast address is sent to a multicast group including the source node and the destination node (see column 6, lines 28-30). Francis et al. further teach a method for a node to join a multicast group by sending a join request to a router (see column 5, lines 57-60). However, Francis et al. do not teach a method of handling node mobility or of updating addresses of mobile nodes. However, node mobility and methods of updating addresses of mobile nodes are well known in the art. For example, Teraoka et al. teach a method of enabling mobile hosts to update their addresses with sending nodes including the steps of: accessing the address of the destination node by the source node (see page 211, lines 1-5); sending a first

packet by the source node to the destination node by using the accessed address (see page 211, lines 5-6); receiving the first packet by the destination node (see page 211, lines 5-6); sending a message, by the source node, to the destination node via the multicast address (see page 211, lines 1-4, note that this is the same process as earlier in the claim, but this process can be performed iteratively as the sender has more data to send to the receiver and must re-locate the receiver); receiving the message by the destination node (see page 211, lines 4-5); sending a third packet containing the new address of the destination node by the destination node to the source node, using an address of the source node; receiving the third packet by the source node (see page 211, lines 4-5); and storing the new address of the destination node in the local cache of the source node (the sender would have to store the address in order to be able to send the next packet to the receiver); sending a second packet by the source node to the destination node by using the new address (see page 211, lines 5-6); and receiving the second packet by the destination node (see page 211, lines 5-6), which has the advantage of enabling host mobility in a network. One skilled in the art would have recognized the advantage of enabling host mobility in a network as taught by Teraoka et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of host mobility as taught by Teraoka et al. into the invention of Francis et al. to achieve the advantage of enabling host mobility in a network. Francis et al. in view of Teraoka et al. differ from claim 5 in that they fail to disclose that the routers can be implemented as software. However, implementing routers as software is well known in the art. For example, Short et al. teach that routers can be implemented as software and/or hardware (see column 2, lines 29-30), which has the advantage of adding flexibility to the network design. One skilled in the art would have recognized the

advantage of being able to implement routers using software and/or hardware as taught by Short et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of software and/or hardware for routers as taught by Short et al. into the invention of Francis et al. in view of Teraoka et al. to achieve the advantage of adding flexibility to the network design.

21. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teraoka et al. in view of Short as applied to claim 1 above, and further in view of V-One Corporation ("V-One's Smartgate VPN").

22. Referring to claim 6, Teraoka et al. in view of Short et al. disclose the method of claim 1 but differ from claim 6 in that they do not disclose that the network is a private network running on a public network infrastructure. However, the use of private networks over a public network infrastructure is well known in the art. For example, V-One Corporation teaches the use of VPNs, which have the advantage of extending the reach of a normal network by using the public network infrastructure. One skilled in the art would have recognized the advantage of using a VPN as taught by V-One Corporation. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of VPNs as taught by V-One Corporation into the invention of Teraoka et al. in view of Short et al. to achieve the advantage of extending the reach of a normal network by using the public network infrastructure.

23. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teraoka et al. in view of Short et al. as applied to claim 8 above, and further in view of Forman et al. ("The Challenges of Mobile Computing").

24. Referring to claim 10, Teraoka et al. in view of Short et al. disclose the method of claim 8 and teach the use of central address store to manage the addresses of mobile hosts (name server, see page 210, lines 35), but differ from claim 10 in that they fail to disclose a method of updating such a central store. However, the use of central address stores for maintaining location about mobile hosts and a method of updating them is well known in the art. For example, Forman et al. disclose the use of a central address store, the method further comprising the steps of: storing an address of the source node and an address of the destination node in the central address store; and wherein the updating step further includes the step of: sending a third packet containing the new address of the destination node to the central address store by the destination node (see pages 8-9, "Central Services"), which has the advantage of making it easier to keep track of mobile hosts. One skilled in the art would have recognized the advantage of using a central address store as taught by Forman et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of a central address store into the invention of Teraoka et al. in view of Short et al. to achieve the advantage of making it easier to keep track of mobile hosts.

25. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Francis et al. (U.S. Patent No. 5,331,637) in view of Teraoka et al. ("A Network Architecture Providing Host Migration Transparency"), further in view of Short et al.

26. Referring to claim 12, Francis et al. teach a method for routing multicast packets in a network in which the nodes communicate by using a multicast address such that a communication sent to the multicast address is sent to a multicast group including the source node and the destination node (see column 6, lines 28-30). Francis et al. further teach a method

for a node to join a multicast group by sending a join request to a router (see column 5, lines 57-60). However, Francis et al. do not teach a method of handling node mobility or of updating addresses of mobile nodes. However, node mobility and methods of updating addresses of mobile nodes are well known in the art. For example, Teraoka et al. teach a method of enabling mobile hosts to update their addresses with sending nodes including the steps of: receiving a first packet by the destination node from the source node, the packet being addressed to the address of the destination node (see page 211, lines 5-6); receiving a message, by the destination node, from the source node via the multicast address (see page 211, lines 1-4, note that this is the same process as earlier in the claim, but this process can be performed iteratively as the sender has more data to send to the receiver and must re-locate the receiver); sending a third packet containing the new address of the destination node by the destination node to the source node, using the address for the source node; and receiving the second packet by the destination node at the new address (see page 211, lines 5-6), which has the advantage of enabling host mobility in a network. One skilled in the art would have recognized the advantage of enabling host mobility in a network as taught by Teraoka et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of host mobility as taught by Teraoka et al. into the invention of Francis et al. to achieve the advantage of enabling host mobility in a network. Francis et al. in view of Teraoka et al. differ from claim 5 in that they fail to disclose that the routers can be implemented as software. However, implementing routers as software is well known in the art. For example, Short et al. teach that routers can be implemented as software and/or hardware (see column 2, lines 29-30), which has the advantage of adding flexibility to the network design. One skilled in the art would have recognized the

advantage of being able to implement routers using software and/or hardware as taught by Short et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of software and/or hardware for routers as taught by Short et al. into the invention of Francis et al. in view of Teraoka et al. to achieve the advantage of adding flexibility to the network design.

27. Referring to claim 12, disclose that the source node and the destination node have a local address cache and communicate by using a multicast address, and wherein the updating step further includes the steps of: sending a joining request, by the destination node, to a router to add the new address of the destination node to the multicast group; receiving a message from the source node by the destination node, via the multicast address; and sending a third packet containing the new address of the destination node by the destination node to the source node, using the address for the source node.

28. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teraoka et al. in view of Short as applied to claim 8 above, and further in view of V-One Corporation ("V-One's Smartgate VPN").

29. Referring to claim 13, Teraoka et al. in view of Short et al. disclose the method of claim 8 but differ from claim 13 in that they do not disclose that the network is a private network running on a public network infrastructure. However, the use of private networks over a public network infrastructure is well known in the art. For example, V-One Corporation teaches the use of VPNs, which have the advantage of extending the reach of a normal network by using the public network infrastructure. One skilled in the art would have recognized the advantage of using a VPN as taught by V-One Corporation. Therefore, it would have been obvious to a person with

ordinary skill in the art at the time of the invention to incorporate the use of VPNs as taught by V-One Corporation into the invention of Teraoka et al. in view of Short et al. to achieve the advantage of extending the reach of a normal network by using the public network infrastructure.

30. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teraoka et al. in view of Short as applied to claim 15 above, and further in view of V-One Corporation ("V-One's Smartgate VPN").

31. Referring to claim 16, Teraoka et al. in view of Short et al. disclose the method of claim 15 but differ from claim 16 in that they do not disclose that the network is a private network running on a public network infrastructure. However, the use of private networks over a public network infrastructure is well known in the art. For example, V-One Corporation teaches the use of VPNs, which have the advantage of extending the reach of a normal network by using the public network infrastructure. One skilled in the art would have recognized the advantage of using a VPN as taught by V-One Corporation. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of VPNs as taught by V-One Corporation into the invention of Teraoka et al. in view of Short et al. to achieve the advantage of extending the reach of a normal network by using the public network infrastructure.

32. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teraoka et al. in view of Short as applied to claim 18 above, and further in view of V-One Corporation ("V-One's Smartgate VPN").

33. Referring to claim 19, Teraoka et al. in view of Short et al. disclose the method of claim 18 but differ from claim 19 in that they do not disclose that the network is a private network

running on a public network infrastructure. However, the use of private networks over a public network infrastructure is well known in the art. For example, V-One Corporation teaches the use of VPNs, which have the advantage of extending the reach of a normal network by using the public network infrastructure. One skilled in the art would have recognized the advantage of using a VPN as taught by V-One Corporation. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of VPNs as taught by V-One Corporation into the invention of Teraoka et al. in view of Short et al. to achieve the advantage of extending the reach of a normal network by using the public network infrastructure.

34. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teraoka et al. ("A Network Architecture Providing Host Migration Transparency").

35. Referring to claim 21, Teraoka et al. disclose a data processing system for communicating in a network with a source node and a destination node, wherein the source node and the destination node have an address, the data processing system comprising: means for accessing an address of the destination node (see page 213, lines 19-20); means for sending a first packet by the source node to the destination node by using the accessed address (see page 213, lines 20-22); means for receiving the first packet by the destination node at the address of the destination node (see Section 4.2 on pages 213 and 214. Note that Host-X originally receives packets at its original location in Net-A where its PN-address equals its VN-address); means for updating the accessed address to reflect a new address of the destination node responsive to a change in the address of the destination node to the new address (see page 213, lines 33-35); means for sending a second packet by the source node to the destination node by using the new

address (see page 213, lines 35-36); and means for receiving the second packet by the destination node at the new address of the destination node (see page 213, lines 35-36).

36. Claims 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teraoka et al. in view of Short as applied to claim 22 above, and further in view of V-One Corporation ("V-One's Smartgate VPN").

37. Referring to claim 23, Teraoka et al. in view of Short et al. disclose the method of claim 22 but differ from claim 23 in that they do not disclose that the network is a private network running on a public network infrastructure. However, the use of private networks over a public network infrastructure is well known in the art. For example, V-One Corporation teaches the use of VPNs, which have the advantage of extending the reach of a normal network by using the public network infrastructure. One skilled in the art would have recognized the advantage of using a VPN as taught by V-One Corporation. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of VPNs as taught by V-One Corporation into the invention of Teraoka et al. in view of Short et al. to achieve the advantage of extending the reach of a normal network by using the public network infrastructure.

Conclusion

38. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

39. Applicant's arguments filed 22 April 2003 have been fully considered but they are not persuasive.

40. Applicant has argued that Teraoka et al. fail to teach receiving packets at the destination node at the address of the destination node. However, Teraoka et al. do in fact teach that the destination node receives packets at its address while it is resident at its home subnet. Section 4.2 on pages 213 and 214 discloses that a destination node originally resides on its home subnet where its PN-address is equal to its VN-address (as described in Section 4.1 on page 213, column 1, lines 19-20). At its home subnet, the destination node receives packets at the accessed address of the sending node. After the destination node moves to a new subnet, it receives packets at its new address.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Molinari whose telephone number is (703) 305-5742. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MJM

Michael Joseph Molinari
May 7, 2003

ALPUS H. HSU
PRIMARY EXAMINER